

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開平7-96001

(43) 公開日 平成7年(1995)4月11日

(51) Int.Cl.⁶

識別記号

庁内整理番号

F I

技術表示箇所

A 6 1 F 13/15

A 6 1 F 13/ 18

3 7 0

審査請求 未請求 請求項の数2 O L (全 9 頁)

(21) 出願番号 特願平5-244614

(22) 出願日 平成5年(1993)9月30日

(71) 出願人 000000918

花王株式会社

東京都中央区日本橋茅場町1丁目14番10号

(72) 発明者 桑原 真弓

栃木県芳賀郡市貝町市塙4594

(72) 発明者 手塚 晴美

栃木県真岡市飯貝713-2

(72) 発明者 木賀田 哲行

栃木県河内郡河内町中岡本3715-189

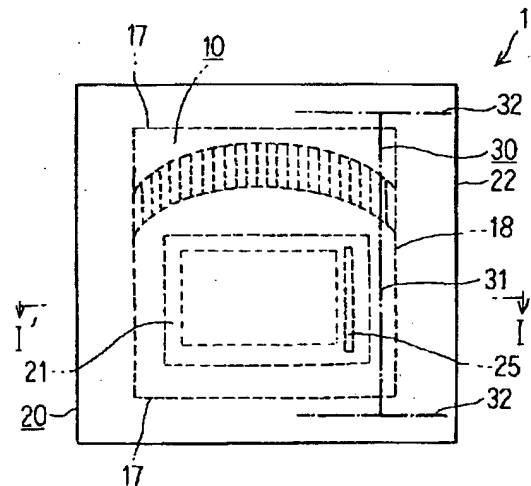
(74) 代理人 弁理士 羽鳥 修

(54) 【発明の名称】 生理用ナプキンの包装構造

(57) 【要約】

【目的】 剥離紙を廃棄する必要がなく、生理用ナプキンがショーツに対して十分なタック力を有し、且つ包装袋に対する剥離性にも優れる粘着層を備え、更には生理用ナプキンの取り出し易い生理用ナプキンの包装構造を提供すること。

【構成】 生理用ナプキンとこれを個装した包装袋とからなり、生理用ナプキンの粘着層と、包装袋の剥離紙とを、着脱自在に粘着させてなり、該生理用ナプキンはその長手方向に折りたたまれており、該包装袋は、主開封部と副開封部とからなり、該生理用ナプキンの取り出し口を形成する開封部を備え、該主開封部は、該包装袋の一侧縁に沿って直線状に、また折りたたまれた生理用ナプキンの一侧縁よりも長く且つ該包装袋の該一侧縁よりも短く設けられており、該副開封部は、該主開封部の両端から該主開封部と直交して直線状に設けられており、該開封部がI字状又はコの字状に形成されている生理用ナプキンの包装構造。



【特許請求の範囲】

【請求項1】 生理用ナブキンとこれを個装した包装袋とからなり、該生理用ナブキンの非肌当接面に設けられた粘着層と、該包装袋の内表面に固定された剥離紙とを、着脱自在に粘着させてなる生理用ナブキンの包装構造において、

上記生理用ナブキンは、その長手方向に折りたたまれており、

上記包装袋は、一つの主開封部と二つの副開封部とからなる開封部を備え、該開封部を開封することにより、上記生理用ナブキンの取り出し口が形成されるようになされており、

上記主開封部は、上記包装袋の一侧縁に沿って直線状に設けられており、また該主開封部の長さは、折りたたまれた上記生理用ナブキンの一侧縁の長さよりも長く且つ上記包装袋の上記一侧縁の長さよりも短くなるように設けられており、

上記副開封部は、上記主開封部の両端から、上記主開封部と直交する方向に直線状に設けられており、

上記開封部がI字状又はコの字状に形成されている、

ことを特徴とする生理用ナブキンの包装構造。

【請求項2】 生理用ナブキンとこれを個装した包装袋とからなり、該生理用ナブキンの非肌当接面に設けられた粘着層と、該包装袋の内表面に固定された剥離紙とを、着脱自在に粘着させてなる生理用ナブキンの包装構造において、

上記生理用ナブキンは、その長手方向に折りたたまれており、

上記包装袋は、開封部を備え、該開封部を開封することにより、上記生理用ナブキンの取り出し口が形成されるようになされており、

上記開封部は、上記包装袋の一侧縁に沿って湾曲形状に設けられており、また上記開封部の長さは、折りたたまれた上記生理用ナブキンの一侧縁の長さよりも長くなされており、且つその両端又は中央が、上記生理用ナブキンの一侧縁に対して生理用ナブキン側に位置するように設けられている、

ことを特徴とする生理用ナブキンの包装構造。

【発明の詳細な説明】

【0001】

【産業上の利用分野】 本発明は、剥離紙を廃棄処分する必要がなく、且つショーツに対し、充分なタック力を有する生理用ナブキンの包装構造に関する。

【0002】

【従来の技術及び発明が解決しようとする課題】 生理用ナブキンには、通常、該ナブキンをショーツに固定し、且つその使用中におけるズレを防止するための粘着剤と、それを保護する剥離紙とが設けられており、このような生理用ナブキンにおいては、その使用に際して、剥離紙を剥離・廃棄する必要があるため、剥離紙の廃棄処

分が厄介であり、また、便器に廃棄した場合には便器を詰まらせるという問題がある。

【0003】そこで、剥離紙を有しない生理用ナブキンの包装構造に関する技術が種々提案されており、具体的には、下記①～⑨等がある。

①生理用ナブキンの粘着層がポリオレフィン系フィルムに直接当接されてなる生理用ナブキンの包装体（実開昭59-9615号公報）。

②水溶性フィルムからなり、生理用ナブキンの粘着層に当接する部分に剥離層を有する包装袋により、生理用ナブキンを個別包装してなる包装体（実開昭59-25371号公報）。

③生理用ナブキンの粘着層が包装袋のポケット部の開口端から露出し、包装袋の非粘着層がポケット部の上面にて、前記粘着層を止着してなる包装体（実開昭57-34211号公報）。

【0004】④生理用ナブキンの接着部に当接する部分に剥離処理部を有する包装袋が、2枚のシートの4辺をシールし、開封用のミシン目を設けてなる生理用ナブキンの個別包装袋（実開昭58-179120号公報）。

⑤生理用ナブキンの粘着剤層に当接する部分に離型性層を具備する多層樹脂フィルムを包装袋とした生理用ナブキンの包装体（実開昭63-71025号公報）。

⑥オレフィン系重合体とシリコーン共重合体とを主体とする樹脂によるフィルムからなるナブキン用包装袋（実開平2-35724号公報）。

⑦シリコーンを塗布した剥離領域とヒートシール可能なシール用領域とを形成したナブキン用包装袋（実開昭4-11324号公報）。

【0005】⑧1）フラップを、生理用ナブキンの粘着剤を被覆・保護する保護部材として用いた羽根付きナブキンの包装体（実開平3-46316号公報）。

2）羽根付きナブキンの包装構造において、フラップ部分の粘着層を保護するために剥離紙を設けた包装構造（実開平2-17127号公報）。

3）羽根付きナブキンにおいて、両面剥離紙を用いて、フラップと吸収性本体の粘着層とを被覆した生理用ナブキンの包装体（実開昭63-186645号公報）。

【0006】⑨1）生理用ナブキンを剥離処理した包装袋で包装したナブキンの包装構造（特開平3-176376号公報）。

2）剥離紙と包装袋とを固定し、ナブキンを袋から取り出すと同時に剥離紙が剥がれるようにした包装構造（実開平1-150919号公報）。

3）剥離紙を包装袋の口部に挟着し、袋を開封すると同時に剥離紙が粘着部から剥離するナブキンの包装構造（実開昭60-79421号公報）。

4）包装袋を開封して、生理用ナブキンを取り出すことにより剥離紙を自動的に剥離させることができる包装構造（実開昭58-58029号公報及び実開平4-120

733号公報)。

【0007】しかしながら、上述の包装体においては、下記①～⑨等の問題がある。

①上記①の包装体においては、ナブキンを包装する包装袋がフィルム単体であるため、経日的に剥離性が低くなり、ナブキンを取り出す際に包装袋が伸びたり、裂けたりする。また、これを抑制するために、フィルム厚を厚くすると、コストアップはもちろん、フィルム自体が硬くなったり、包装体を容易に開封できなくなるといった欠点を生ずる。

②上記②の包装体においては、フィルム強度が低く、包装袋を剥がす際に伸びたり、裂けたりするという問題があり、また、このような問題を解決するためにフィルムの剥離度を上げると、フィルムの水溶性が損なわれ、便器に廃棄した場合に便器に詰まる。

【0008】③上記③の包装体においては、粘着層をナブキンの1部にしか設けることができないので、ナブキンの使用時における固定性が悪い。

④上記④の包装体においては、ミシン目が設けられているが、このミシン目から容易に空気が入り込み包装体が膨らんでしまうため、持ち運びや開封がし難い。

⑤、⑥上記⑤及び⑥の包装体においては、熱可塑性樹脂としてシリコーン樹脂等の剥離性物質の含有物あるいは共重合体を用いているので、剥離物質がブリードアウトし、温度や湿度によって剥離度が不安定な状態になり易い。さらに剥離面に部分的に剥離力が低下した領域が生じ、場合によっては、フィルムが剥離しなくなってしまう。また、ブリードアウトした剥離性物質が、粘着面に移行することもしばしば起こり、経日的な剥離安定性をいかなる環境においても維持することが困難である。

【0009】⑦上記⑦の包装体においては、上記⑤、⑥と同様の問題があり、更に、あらかじめ剥離可能領域とシール可能領域を設定したフィルムを用いているので、ヒートシール層を設け、必ず決まった位置で製品を包装する必要があり、経済性、生産性に劣る。

⑧上記⑧1)の包装体においては、依然として吸収性本体の粘着層に対しては、剥離紙が必要であり、また上記⑧2)の包装構造においては、フラップ部分の粘着層に対して、剥離紙が必要であり、両者ともに、前述の剥離紙による問題は解決されていない。また、上記⑧3)の包装体においては、フラップ及び吸収性本体の両者の粘着層を両面剥離紙により被覆しているため、前述の剥離紙による問題が解決されていない。

【0010】⑨上記⑨1)及び2)の包装構造においては、包装袋を開封し、包装袋の一端をめくるように剥離するのでナブキンを包装袋から即座に取り出すことができない。上記⑨3)の包装構造においても同様に、包装袋の開封口から露出した剥離紙を引っ張って開封した後、ナブキンと剥離紙とを剥離するのでナブキンを即座に取り出すことができない。上記⑨4)の包装構造においては、ナ

ブキンの前端あるいは後端から引き出しナブキンは展開した形になるので、ナブキンを折りたたんだまま、包装袋から即座に取り出すことができない。

【0011】即ち、上記①～⑨の包装体の構造は、生理用ナブキンに設けられた粘着層と、包装体に設けられた剥離層との剥離性、及び該粘着層のショーツに対するタック力の両方を十分な実用性をもって満足させることができないという問題がある。

【0012】また、包装袋の内表面に剥離紙の一部を固定し、固定された該剥離紙と生理用ナブキンの粘着層とを粘着させた包装構造も提案されているが、このような包装構造では、包装袋を開封し、生理用ナブキンを取り出す際に、上記剥離紙も一緒に掴んでしまい、生理用ナブキンの取り出しがスムーズに行えないという問題がある。

【0013】従って、本発明の目的は、剥離紙を廃棄する必要がなく、生理用ナブキンが、その使用時においてショーツに対して充分なタック力を有する粘着層を備え、該粘着層の包装袋に対する剥離性にも優れ、更に、生理用ナブキンの取り出し性に優れた生理用ナブキンの包装構造を提供することにある。

【0014】

【課題を解決するための手段】本発明者らは、上記問題を解決すべく鋭意研究を重ねた結果、包装構造を構成する包装袋に特定の開封部を設けることにより、上記目的を達成し得ることを見出し本発明を完成するに至った。

【0015】即ち、本発明は、生理用ナブキンとこれを個装した包装袋とからなり、該生理用ナブキンの非肌当接面に設けられた粘着層と、該包装袋の内表面に固定された剥離紙とを、着脱自在に粘着させてなる生理用ナブキンの包装構造において、上記生理用ナブキンは、その長手方向に折りたたまれており、上記包装袋は、一つの主開封部と二つの副開封部とからなる開封部を備え、該開封部を開封することにより、上記生理用ナブキンの取り出し口が形成されるようになされており、上記主開封部は、上記包装袋の側縁に沿って直線状に設けられており、また該主開封部の長さは、折りたたまれた上記生理用ナブキンの側縁の長さよりも長く且つ上記包装袋の上記側縁の長さよりも短くなるように設けられており、上記副開封部は、上記主開封部の両端から、上記主開封部と直交する方向に直線状に設けられており、上記副開封部がI字状又はコの字状に形成されている、ことを特徴とする生理用ナブキンの包装構造(以下、「第1発明」という場合にはこの発明をいう)を提供するものである。

【0016】また、本発明は、生理用ナブキンとこれを個装した包装袋とからなり、該生理用ナブキンの非肌当接面に設けられた粘着層と、該包装袋の内表面に固定された剥離紙とを、着脱自在に粘着させてなる生理用ナブキンの包装構造において、上記生理用ナブキンは、その

長手方向に折りたたまれており、上記包装袋は、開封部を備え、該開封部を開封することにより、上記生理用ナブキンの取り出し口が形成されるようになされており、上記開封部は、上記包装袋の側縁に沿って湾曲形状に設けられており、また上記開封部の長さは、折りたたまれた上記生理用ナブキンの側縁の長さよりも長くなされており、且つその両端又は中央が、上記生理用ナブキンの側縁に対して生理用ナブキン側に位置するように設けられている、ことを特徴とする生理用ナブキンの包装構造（以下、「第2発明」という場合にはこの発明をいう）を提供するものである。

【0017】

【作用】本発明の包装構造は、生理用ナブキンが包装袋により個装されてなり、該生理用ナブキンの粘着層が、該包装袋に固定された剥離紙と着脱自在に粘着されている。そして、生理用ナブキンの使用前（保存時）には、生理用ナブキンに設けられている粘着層は、その全てが上記剥離紙により保護されている。また、該生理用ナブキンの使用時には、包装袋を開封して、これにより形成される生理用ナブキンの取り出し口から生理用ナブキンを引き出す。この際、剥離紙の上記取り出し口側も開封と同時にめくれるので、生理用ナブキンを取り出す際に剥離紙を掴んでしまうことがなく、スムーズに生理用ナブキンを取り出して、ショーツ等に貼着して使用に供することができる。

【0018】

【実施例】以下、添付図面を参照して、本発明の実施例を詳細に説明するが、本発明はこれらに限定されるものではない。

【0019】図1～図6を参照して、本発明の第1発明の実施例について説明する。図1は、第1発明の生理用ナブキンの包装構造の1実施例を示す平面図であり、図2は、図1に示す包装構造のI-I'断面図である。図3は、図1における生理用ナブキンの展開斜視図であり、図4は、図1における包装袋の生理用ナブキンを個装する前の状態（包装用シート）を示す斜視図である。また、図5は、図1に示す包装構造を開封して、生理用ナブキンの取り出し口を形成した状態を示す平面図であり、図6は、図1に示す包装構造から生理用ナブキンを取り出す状態を示す横断面図（図2相当図）である。

【0020】図1及び図2に示す本実施例の生理用ナブキンの包装構造1は、生理用ナブキン10とこれを個装した包装袋20とからなり、該生理用ナブキン10の非肌当接面12に設けられた粘着層16と、該包装袋20の内表面に固定された剥離紙21とを、着脱自在に粘着させてなる。そして、上記生理用ナブキン10は、その長手方向に折りたたまれており、上記包装袋20は、一つの主開封部31と二つの副開封部32とからなる開封部30を備え、該開封部30を開封することにより、上記生理用ナブキン10の取り出し口24が形成されるよ

うになされており、上記主開封部31は、上記包装袋20の側縁22に沿って直線状に設けられており、また該主開封部31の長さは、折りたたまれた上記生理用ナブキン10の側縁18の長さよりも長く且つ上記包装袋20の上記側縁22の長さよりも短くなるように設けられており、上記副開封部32は、上記主開封部31の両端から、上記主開封部31と直交する方向に直線状に設けられており、上記開封部30が1字状に形成されている。

【0021】更に詳しくは、本実施例の生理用ナブキンの包装構造1における生理用ナブキン10には、図3に示すように、その長手方向を前方部13、中央部14及び後方部15に略3等分する2つの折曲部17が設けられており、上記前方部13及び中央部14の非肌当接面12側に長方形の粘着層16が設けられている。また、上記包装袋20は、図4に示す包装用シート20'により形成されており、該包装用シート20'には、固定部25を介して固定された剥離紙21と、ミシン目により形成された開封部30とが設けられている。また、上記固定部25は、上記開封部30側の剥離紙21の端部を固定するように設けられている。

【0022】そして、上記包装構造1は、上記生理用ナブキン10を、上記折曲部17において、該後方部15、該前方部13の順序で、該中央部14の肌当接面11側に3つ折にし、上記粘着層16が上記剥離紙21の内表面と当接するように上記包装用シート20'で包装し、該包装用シート20'の両側縁22、22'及び両側縁端部23を止着して、包装袋20で生理用ナブキン10を個装することにより、形成されている。

【0023】ここで、上記前方部13は、生理用ナブキンの使用時において、使用者の前面方向に位置する部位である。また、上記包装袋20の両側縁22、22'及び両側縁端部23は、ヒートシールにより止着されている。

【0024】尚、上記生理用ナブキン10は、肌当接面11が液透過性のシート材により、また、非肌当接面12が液不透過性のシート材によりそれぞれ形成され、更に上記肌当接面11と非肌当接面12との間に液保持性の吸収体を有する、通常の生理用ナブキンである。

【0025】上記粘着層16は、上記非肌当接面12上に粘着剤を塗布するか、あるいは剥離処理したフィルムに塗布した後、上記非肌当接面12上に転写する等して形成される。上記粘着部を形成する粘着剤としては、例えば、スチレン系ブロックポリマー、粘着付与剤及び軟化剤を主成分とし、スチレン相とゴム相との2相ブロック構造を保持しているもの等が用いられる。

【0026】上記スチレン系ブロックポリマーとしては、スチレン-エチレン-ブチレン-スチレンブロック共重合体（SEBS）、スチレン-イソブレン-スチレンブロック共重合体（SIS）、スチレン-ブタジエン

ースチレンブロック共重合体(SBS)、スチレンーエチレンープロピレンースチレン共重合体(SEPS)等が挙げられる。これらのスチレン系ブロックポリマーは、スチレン部分の分子量が、好ましくは7000~20000、ゴム部分の分子量が、好ましくは35000~70000のブロック共重合体である。

【0027】また、上記粘着付与剤としては、軟化点が80℃以上で、分子量が400~2000であるC、系石油樹脂、C、系石油樹脂、C、/C、系石油樹脂、αピネン、βピネン又はジベンテンの共重合体であるポリテルペン樹脂、ロジン系樹脂、若しくはこれらの水添物等が挙げられる。上記軟化剤としては、軟化点が10℃以下で平均分子量が200~700のプロセスオイル、各種可塑剤、ポリブテン、液状樹脂等が挙げられる。

【0028】上記粘着剤としては、特に下記組成のものが好ましい。

スチレン系ブロックポリマー 100重量部、
粘着付与剤 150~200重量部、
軟化剤 30~100重量部

【0029】また、上記包装袋20を構成する上記包装用シート20'としては、厚さ5~20μmのポリオレフィンフィルムが好ましく用いられる。

【0030】上記剥離紙21としては、剥離紙基材に剥離剤を塗布したものが好ましく用いられる。上記剥離紙基材としては、厚さ5~50μmのポリプロピレン、低密度ポリエチレン、ポリビニルアルコール等のフィルムあるいは不織布や紙及びこれらの複合材料が好ましく挙げられる。上記剥離剤としては、シリコーン系、フッ素系、イソシアネート系等のものが好ましい。特に上記剥離剤として、シリコーン樹脂系のものを上記剥離紙基材に塗布して加熱乾燥するか、スプレーで吹きつけ薄い被膜を形成させる等して用いるのが好ましい。

【0031】また、上記固定部25は、例えば、接着剤あるいは熱シールにより形成されており、接着剤としては上記粘着層16と同様にスチレン系ブロックポリマーを主成分とするもの等が用いられる。また、熱シールによる場合は包装材、剥離紙基材共にポリオレフィン系フィルムを用いることが好ましい。

【0032】また、上記剥離紙21と上記粘着層16とは、下記測定方法による180°ピール強度が、好ましくは30~90g/50mmとなるように両者を選択するのが好ましい。上記の180°ピール強度となる粘着剤と剥離紙との組み合わせでは、通常の剥離紙が包装材に全面固定されたものにおいての剪断強度は、数百g/50mm~数千g/50mmに達してしまい、容易に剥離させることができなくなる。また、剪断強度が低くなるようにして容易に剥がせるようにすると、包装構造の保存時(生理用ナブキンの使用前)において、粘着層と剥離紙とが容易に剥離してしまい、該粘着層が剥離紙以外の部分に粘着してしまう等の弊害が生じる。また、上

記一側縁22の反対(側縁22')側の包装材内面に剥離紙の固定部を設けた構成における剪断強度は、本実施例のように取り出す側における固定部を介して固定した剥離紙を剥離する際の180°ピール強度よりもはるかに大きく、実際、通常の粘着剤と剥離紙との組み合わせにおいては、剥がそうとすると包装袋が破断してしまうという弊害が生じる。

【0033】<180°ピール強度(接着強度)>粘着剤をポリエチレンテレフタレートフィルムに厚さ50μmで塗布し、ステンレス板(sus304)に2kgのゴムローラーを1往復させて圧着したときの180°ピール強度を測定することにより求めた。

【0034】本実施例の生理用ナブキンの包装構造1における特徴部分について、更に詳細に説明すると、図1に示すように、上記包装袋20は、一つの主開封部31と二つの副開封部32とからなる開封部30を備え、該開封部30を開封することにより、上記生理用ナブキン10の取り出し口24が形成されるようになされている。上記主開封部31は、上記包装袋20の一側縁22に沿って直線状に設けられ、また該主開封部31の長さが、折りたたまれた上記生理用ナブキン10の長手方向の一側縁18の長さよりも長く且つ上記包装袋20の上記一側縁22の長さよりも短くなるように設けられている。

【0035】また、上記副開封部32は、上記主開封部31の両端から、上記一側縁22方向及びその反対方向における上記主開封部31と直交する方向に、それぞれ直線状に設けられており、上記一側縁22側の一端は、それぞれ上記一側縁22にまで達している。そして、上記主開封部31と上記副開封部32とにより形成された上記開封部30は、全体としてI字状に形成されている。

【0036】そして、上記生理用ナブキン10の使用時においては、先ず、図5に示すように、上記開封部30を開封して取り出し口24を形成し、次いで、図6に示すように、包装袋20の一側縁22を折り返した後、生理用ナブキン10を矢印方向に引き出すことにより、生理用ナブキン10を取り出すことができる。この際、上記包装袋20を折り返すことにより、生理用ナブキン10の中央部14側に位置する剥離紙21が剥離されて捲れるので、生理用ナブキン10を取り出す際に、中央部14側に位置する剥離紙21を掴んでしまうことがなく、取り出し操作をスムーズに行うことができる。

【0037】また、生理用ナブキン10を取り出す際において、上記剥離紙21は、上記固定部25を介して包装袋20に連結されているので、取り出し口24側から順次剥離する。そして、最終的に生理用ナブキン10を取り出した時には、上記剥離紙21は、その上記固定部25と反対側の端縁が取り出し口24から外部に飛び出す(図示せず)。

【0038】このように、本発明の包装構造は、生理用ナプキンを取り出した後にも剥離紙が包装袋に連結されたままであるので、剥離紙を廃棄する必要が生じることがない。また、本発明の包装構造は、上述の如く、生理用ナプキンの長手方向の側縁から、又は折曲部から引き出せるようになすことができ、生理用ナプキンを折りたたんだまま取り出すこともできる。また、上記剥離紙が生理用ナプキンを取り出す方向から順次剥離するので、上記粘着層をスムーズに剥離させることができ、更には、生理用ナプキンを取り出す際に粘着層が剥離紙以外の部位に粘着して粘着力が低下する等の弊害が生じることがない。

【0039】本実施例の生理用ナプキンの包装構造1は、例えば、次のようにして形成することができる。本実施例の生理用ナプキンの包装構造1を形成するには、先ず、図3に示す生理用ナプキン10を3つ折りにした後、上記粘着部16が、図4に示す包装用シート20'の剥離紙22にそれぞれ当接するように、生理用ナプキン10を包装用シート20'に載置し、次いで、包装用シート20'をその両縁端部23が互いに重なるように折り込み、最終に包装袋20の両側縁22、22'及び両縁端部23を、ヒートシールする等して止着することにより形成することができる。

【0040】工業的には、例えば、連続した包装用シートに、連続的に剥離紙固定処理及び乾燥工程を行い、次いで開封部を作成するためにロータリーカッターでミシン目を入れるカッティング工程を行い、図4に示すような包装用シートが連続的に繋がった連続シートを作成する。別に、連続的に3つ折りにした生理用ナプキンを上記連続シートの剥離紙上に載置し、個別に切断・分離する切断工程を行い、更に個装・巻き上げ工程を行った後、最終にヒートシールする止着工程を、それぞれ連続的に行う等して行うことができる。

【0041】次に、図7に示す第1発明の他の実施例について説明する。尚、特に詳述しない点については、上述した実施例と同様である。図7は、第1発明の生理用ナプキンの包装構造の他の実施例を示す斜視図である。

【0042】図7に示す他の実施例の生理用ナプキンの包装構造1Aは、副開封部32Aが、主開封部31Aの両端から、一側縁22Aに対して反対方向に且つ上記主開封部31と直交する方向に直線状に設けられている。そして、上記開封部30は、全体としてコの字状に形成されている。

【0043】次に、本発明の第2発明の実施例について、図8を参照して説明する。尚、特に説明しない点については、上述した第1発明の実施例と同様である。図8は、第2発明の生理用ナプキンの包装構造の実施例を示す斜視図である。

【0044】図8に示す第2発明の生理用ナプキンの包装構造101は、生理用ナプキン110とこれを個装し

た包装袋120とからなり、該生理用ナプキン110の非肌当接面112に設けられた粘着層116と、該包装袋120の内表面に固定された剥離紙122とを、着脱自在に粘着させてなる。そして、上記生理用ナプキン110は、その長手方向に折りたたまれており、上記包装袋120は、開封部130を備え、該開封部130を開封することにより、上記生理用ナプキン110の取り出し口124が形成されるようになされており、上記開封部130は、上記包装袋120の一側縁122に沿って湾曲形状に設けられており、また上記開封部130の長さが、折りたたまれた上記生理用ナプキン110の一側縁118の長さよりも長くなされており、且つその両端133が、上記生理用ナプキン110の一側縁118に対して生理用ナプキン110側に位置するように設けられている。

【0045】詳細には、上記開封部130は、円弧状に湾曲形成されており、その両端133は、包装袋の縁端123、123'に達するように、且つ上記一側縁118に対して、生理用ナプキン110側に位置するように設けられている。また、上記開封部130の中央134は、上記一側縁118に対して、上記一側縁122側に位置するように設けられている。そして、上記包装構造101を開封して生理用ナプキン110を取り出す際には、上述した第1発明と同様に、開封部130を開封した後、上記一側縁122を折り返して、取り出す。これにより、生理用ナプキン110の中央部側の剥離紙121（図示せず）における取り出し口側が捲れるので、生理用ナプキンと一緒に剥離紙を掴んでしまうことなく、スムーズに取り出せる。

【0046】第2発明の他の実施例について、図9及び図10を参照して説明する。ここで、図9は、第2発明の他の実施例を示す平面図であり、図10は、第2発明の更に他の実施例を示す平面図である。尚、特に説明しない点については、上述した第1発明の実施例と同様である。

【0047】図9に示す第2発明の他の実施例の生理用ナプキンの包装構造101Aは、上記開封部130Aが、円弧状に湾曲形成されており、その中央134Aは、上記生理用ナプキン110Aの一側縁118Aに対して、生理用ナプキン110A側に位置するように設けられている。また、その両端133Aは、包装袋の縁端123A、123A'に達するように、且つ上記生理用ナプキン110Aの一側縁118Aに対して、上記包装袋120Aの一側縁122A側に設けられている。

【0048】図10に示す第2発明の更に他の実施例の生理用ナプキンの包装構造101Bは、上記開封部130Bが、台形状に湾曲形成されており、その両端133Bは、包装袋120Bの縁端123B、123B'に達する用に設けられている。また、その両端133Bは、上記生理用ナプキン110Bの一側縁118Bに対

して生理用ナブキン110B側に位置するように設けられており、その中央134Bは、上記生理用ナブキン110Bの一側縁118Bに対して包装袋120Bの一側縁122B側に位置するように設けられている。このように、第2発明における上記「湾曲形状」には、曲線により形成される形状だけでなく、図10に示すような直線により形成される形状も含まれる。

【0049】尚、本発明の生理用ナブキンの包装構造は、上述した実施例に限定されるものではなく、上記の粘着層を、上述した長方形のものではなく、上記取り出し口と平行に、線状、スパイラル状又はドット状等の形状のものを複数配設して形成することもでき、また、上記固定部もドット状等とすることができる。また、本発明の生理用ナブキンの包装構造においては、上記生理用ナブキンを折りたたんだ折曲部に沿って上記取り出し口が形成されるように、上記開封部を設けるともできる。また、上記剥離紙の枚数も上述の実施例に限定されず、一つ若しくは3つ以上とすることができる。

【0050】

【発明の効果】本発明の生理用ナブキンの包装構造は、剥離紙を廃棄する必要がなく、生理用ナブキンが、その使用時においてショーツに対して十分なタック力を有する粘着層を備え、該粘着層の包装袋に対する剥離性にも優れ、更には、生理用ナブキンの取り出し性に優れたものであり、具体的には、下記①～⑥等の効果を奏する。

【0051】①包装袋が伸びたり、裂けたりしない。

②袋を剥がす際に生じる音が小さい。

③包装袋が熱により収縮しない。

④包装袋が粘着層から剥がしやすい。

⑤粘着部を多数設けることができる。

⑥生理用ナブキンの使用時における剥離紙を剥がす手間が省ける。特に通常の羽根付きナブキンにおいて用いられているフラップ部分等の剥離紙を廃棄する必要がなく、該剥離紙を便器に廃棄して詰まらせることがない。

⑦また、生理用ナブキンの粘着層を、ショーツに対して十分な固定力を有する程度の広さとすることができる。

⑧包装構造の大きさを小さくでき、コンパクトであり、また、固装袋（包装袋）をめくってナブキンから剥がす必要がなく、ただナブキンを固装袋から抜き取ることで、ワンタッチでナブキンを剥離紙から剥がすことができ、更には、生理用ナブキンを取り出す際に生理用ナブキンと一緒に剥離紙を掴んでしまうことがない。

【図面の簡単な説明】

【図1】図1は、第1発明の生理用ナブキンの包装構造の1実施例を示す平面図である。

【図2】図2は、図1に示す包装構造のI-I'断面図である。

【図3】図3は、図1に示す生理用ナブキンの斜視図である。

【図4】図4は、図1に示す包装袋の生理用ナブキンを包装する前の状態（包装用シート）の斜視図である。

【図5】図5は、図1に示す包装構造を開封して生理用ナブキンの取り出し口を形成した態様を示す平面図である。

【図6】図6は、図1に示す包装構造から生理用ナブキンを取り出す態様を示す横断面図（図2相当図）である。

【図7】図7は、第1発明の生理用ナブキンの包装構造の他の実施例を示す平面図である。

【図8】図8は、第2発明の生理用ナブキンの包装構造の1実施例を示す平面図である。

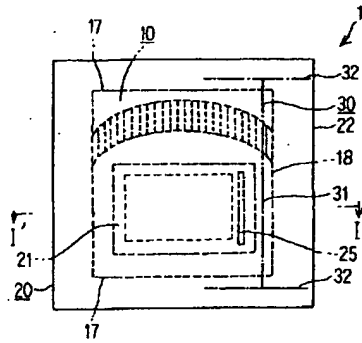
【図9】図9は、第2発明の生理用ナブキンの包装構造の他の実施例を示す平面図である。

【図10】図10は、第2発明の生理用ナブキンの包装構造の更に他の実施例を示す平面図である。

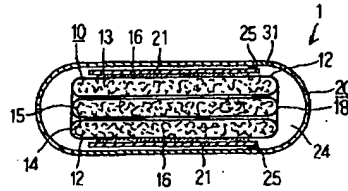
【符号の説明】

- 1 生理用ナブキンの包装構造
- 10 生理用ナブキン
- 11 肌当接面
- 12 非肌当接面
- 13 前方部
- 14 中央部
- 15 後方部
- 16 粘着層
- 17 折曲部
- 18 一側縁
- 20 包装袋
- 20' 包装用シート
- 21 剥離紙
- 22 一側縁
- 23 縁端部
- 24 取り出し口
- 25 固定部
- 30 開封部
- 31 主開封部
- 32 副開封部

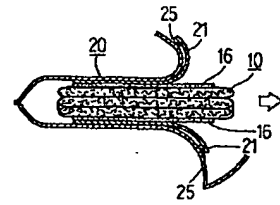
【図1】



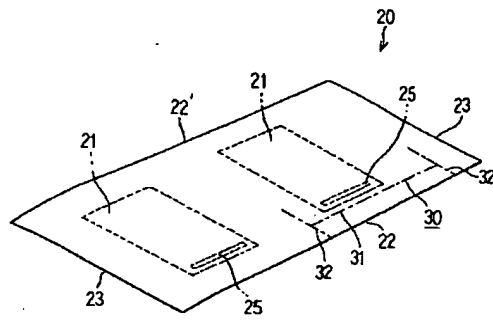
【図2】



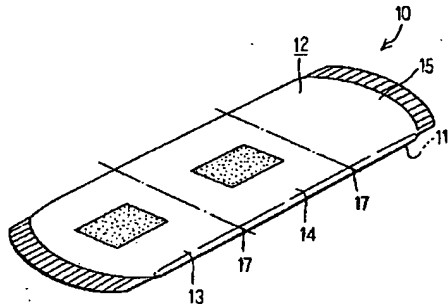
【図6】



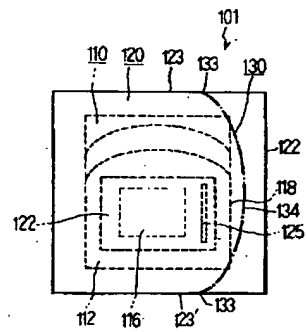
【図4】



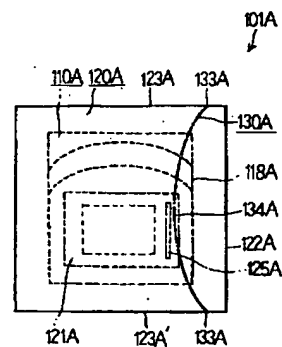
【図3】



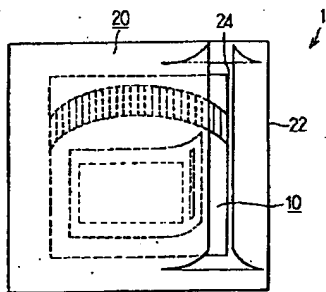
【図8】



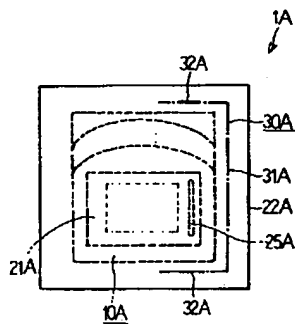
【図9】



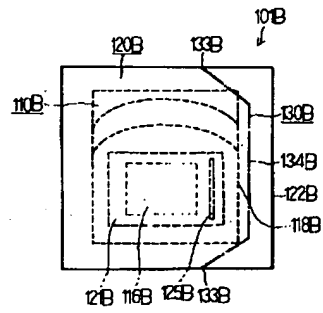
【図5】



【図7】



【図10】



*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

3.In the drawings, any words are not translated.

Bibliography

(19) [Country of Issue] Japan Patent Office (JP)

(12) [Official Gazette Type] Open patent official report (A)

(11) [Publication No.] JP,7-96001,A

(43) [Date of Publication] April 11, Heisei 7 (1995)

(54) [Title of the Invention] Package structure of a sanitary napkin

(51) [International Patent Classification (6th Edition)]

A61F 13/15

[FI]

A61F 13/18 370

[Request for Examination] Un-asking.

[The number of claims] 2

[Mode of Application] OL

[Number of Pages] 9

(21) [Filing Number] Japanese Patent Application No. 5-244614

(22) [Filing Date] September 30, Heisei 5 (1993)

(71) [Applicant]

[Identification Number] 000000918

[Name] Kao Corp.

[Address] 1-14-10, Nihombashi Kayaba-cho, Chuo-ku, Tokyo

(72) [Inventor(s)]

[Name] Kuwahara True bow

[Address] 4594, Ichihana, Ichikaimachi, Haga-gun, Tochigi-ken

(72) [Inventor(s)]

[Name] Tezuka Harumi

[Address] 713-2, Iigai, Mooka-shi, Tochigi-ken

(72) [Inventor(s)]

[Name] Tree Kata Tetsuyuki

[Address] 3715-189, Naka-Okamoto, Kawachimachi, Kawachi-gun, Tochigi-ken

(74) [Attorney]

[Patent Attorney]

[Name] Hatori **

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

3.In the drawings, any words are not translated.

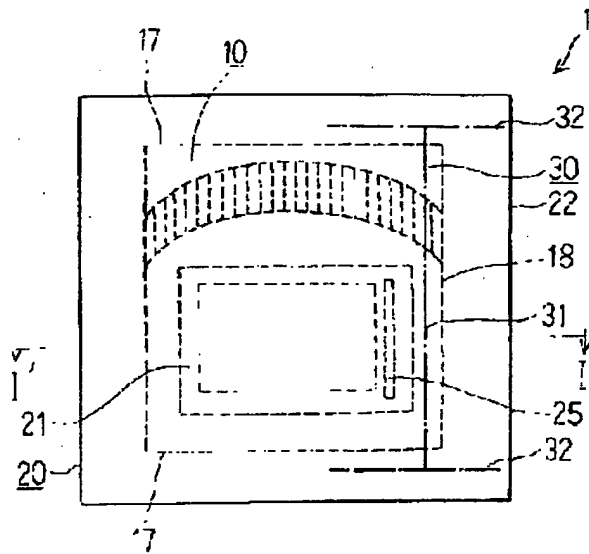
Epitome

(57) [Abstract]

[Objects of the Invention] Have the adhesive layer which does not need to discard a releasing paper, and a sanitary napkin has sufficient tuck force to shorts, and is excellent also in the detachability over a package bag, and offer the package structure of the sanitary napkin which a sanitary napkin tends [further] to take out.

[Elements of the Invention] It consists of a package bag which carried out the unit protection of this to a sanitary napkin. An adhesive layer of a sanitary napkin, A releasing paper of a package bag is made to come to adhere free [attachment and detachment], and this sanitary napkin is folded up by the longitudinal direction. This package bag It consists of the main opening section and the subopening section, and has the opening section which forms output port of this sanitary napkin. This main opening section Along with one side edge of this package bag, it is prepared in the shape of a straight line shorter [it is longer than one side edge of a sanitary napkin folded up again, and] than this one side edge of this package bag. This subopening section Package structure of a sanitary napkin where intersect perpendicularly with this main opening section from both ends of this main opening section, it is prepared in the shape of a straight line, and this opening section is formed the shape of I character, and in the shape of [of KO] a character.

[Translation done.]



[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.*** shows the word which can not be translated.

3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] It is made as [form / by having the opening section characterized by providing the following, and opening this opening section / output port of the above-mentioned sanitary napkin]. The above-mentioned main opening section Along with one side edge of the above-mentioned package bag, it is prepared in the shape of a straight line. Moreover, the length of this main opening section It is prepared so that it may become it is longer than the length of one side edge of the folded-up above-mentioned sanitary napkin, and shorter than the length of a up Norikazu side edge of the above-mentioned package bag. The above-mentioned subopening section Package structure of a sanitary napkin characterized by what it is prepared in the direction which intersects perpendicularly with the above-mentioned main opening

section in the shape of a straight line from both ends of the above-mentioned main opening section, and the above-mentioned opening section is formed for the shape of I character, and in the shape of [of KO] a character. An adhesive layer which consisted of a package bag which carried out the unit protection of this to a sanitary napkin, and was prepared in a non-skin contact side of this sanitary napkin. The above-mentioned sanitary napkin is folded up by the longitudinal direction in package structure of a sanitary napkin to which a releasing paper fixed to an internal surface of this package bag is made to come to adhere free [attachment and detachment], and the above-mentioned package bag is the one main opening section and the two subopening sections.

[Claim 2] In package structure of a sanitary napkin to which an adhesive layer which consisted of a package bag which carried out the unit protection of this to a sanitary napkin, and was prepared in a non-skin contact side of this sanitary napkin, and a releasing paper fixed to an internal surface of this package bag are made to come to adhere free [attachment and detachment]. The above-mentioned sanitary napkin is folded up by the longitudinal direction. The above-mentioned package bag It is made as [form / by having the opening section and opening this opening section / output port of the above-mentioned sanitary napkin]. The above-mentioned opening section Along with one side edge of the above-mentioned package bag, it is prepared in a curve configuration. Moreover, the length of the above-mentioned opening section Package structure of a sanitary napkin characterized by what it is made for a long time than the length of one side edge of the folded-up above-mentioned sanitary napkin, and is prepared so that the both ends or center may be located in a sanitary napkin side to one side edge of the above-mentioned sanitary napkin.

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the package structure of a sanitary napkin of it not being necessary to carry out disposal of the releasing paper and, and having sufficient tuck force to shorts.

[0002]

[Description of the Prior Art] The binder for fixing this napkin to shorts and usually preventing gap in use [the] and the releasing paper which protects it are formed in the sanitary napkin, and since the use is faced in such a sanitary napkin and it is necessary to exfoliate and discard a releasing paper, the disposal of a releasing paper is troublesome, and when it discards to a toilet bowl, there is a problem of blocking a toilet bowl.

[0003] Then, the technology about the package structure of a sanitary napkin where it does not have a releasing paper is proposed variously, and, specifically, there is following **-* etc.

** The package object of the sanitary napkin with which a polyolefine system film comes to contact the adhesive layer of a sanitary napkin directly (JP,59-9615,Y).

** The package object which comes to carry out the individual package of the sanitary napkin with the package bag which has stratum disjunctum into the portion which consists of a water soluble film and contacts the adhesive layer of a sanitary napkin (JP,59-25371,U).

** The package object with which the adhesive layer of a sanitary napkin is exposed from the opening edge of the pocket section of a package bag, and the non-adhesive layer of a package bag comes to attach said adhesive layer firmly on the upper surface of the pocket section (JP,57-34211,U).

[0004] ** The individual package bag of the sanitary napkin which the package bag which has the exfoliation processing section carries out the seal of the four sides of the sheet of two sheets to the portion which contacts jointing of a sanitary napkin, and comes to prepare the perforation for opening (JP,58-179120,U).

** The package object of the sanitary napkin which used as the package bag the multilayer resin film which possesses a mold-release characteristic layer into the portion which contacts the binder layer of a sanitary napkin (JP,63-71025,U).

** The package bag for napkins which consists of a film by the resin which makes an olefin system polymer and a silicone copolymer a subject (JP,2-35724,U).

** The package bag for napkins in which the exfoliation field and the field for seals which can be heat sealed which applied silicone were formed (JP,4-11324,U).

[0005] **1) The package object of the napkin with a wing which used the flap as a protection member which covers and protects the binder of a sanitary napkin (JP,3-46316,U).

2) Package structure which formed the releasing paper in the package structure of a napkin with a wing in order to protect the adhesive layer of a flap portion (JP,2-17127,U).

3) The package object of the sanitary napkin which covered the flap and the adhesive layer of an absorptivity main part in the napkin with a wing using the double-sided releasing paper (JP,63-186645,U).

[0006] **1) Package structure of the napkin which packed the sanitary napkin with the package bag which carried out exfoliation processing (JP,3-176376,A).

2) Package structure in which it was made for a releasing paper to separate while the releasing paper and the package bag were fixed and the napkin was picked out from the bag (JP,1-150919,U).

3) Package structure of a napkin where a releasing paper exfoliates from the adhesion section at the same time it fastens a releasing paper to the regio oralis of a package bag and opens a bag (JP,60-79421,U).

4) Package structure where a releasing paper can be made to exfoliate automatically by opening a package bag and taking out a sanitary napkin (JP,58-58029,U and JP,4-120733,U).

[0007] However, there are problems, such as following ****, in an above-mentioned package object.

** In the package object of the above-mentioned **, since the package bag which packs a napkin is a film simple substance, detachability becomes low daily, and in case a napkin is taken out, a package bag extends or splits. Moreover, if film thickness is thickened in order to control this, the film itself will produce the defect of it becoming impossible to become hard or to open a package object easily as well as a cost rise.

** In the package object of the above-mentioned **, film reinforcement is low, and in order for there to be a problem of extending or splitting and to solve such a problem, when whenever [film's exfoliation] was raised, and the water solubility of a film is spoiled and it discards to a toilet bowl when removing a package bag, get it blocked in a toilet bowl.

[0008] ** In the package object of the above-mentioned **, since an adhesive layer can be prepared only in the one section of a napkin, the stability at the time of use of a napkin is bad.

** In the package object of the above-mentioned **, although the perforation is prepared, since air enters easily from this perforation and a package object swells, it is hard to carry out carrying and opening.

** In the package object of the ** above-mentioned ** and **, since the inclusion or copolymers of detachability material, such as silicone resin, are used as thermoplastics, exfoliation material carries out bleed out and will tend to be in a condition with whenever [exfoliation / unstable] with temperature or humidity. The field where the exfoliation force furthermore fell to the stripped plane partially will be generated, and a film will stop exfoliating depending on the case. Moreover, it is difficult for it to also often happen that the detachability material which carried out bleed out shifts to an adhesive face, and to maintain daily exfoliation stability in any environment.

[0009] ** In the package object of the above-mentioned **, there is the same problem as the above-mentioned ** and **, and since the film which set up further beforehand the field which can be exfoliated, and the seal possible field is used, it is always necessary to prepare a heat-sealing layer and to pack a product in the regular location, and inferior to economical efficiency and productivity.

** In the package object of above-mentioned **1, the problem a releasing paper is required, and a releasing paper is required to the adhesive layer of a flap portion in the package structure of above-mentioned **2, and according to the releasing paper of the above-mentioned [both] is not still solved to the adhesive layer of an absorptivity main part. Moreover, in the package object of above-mentioned **3, since the adhesive layer of both flap and absorptivity main part is covered with the double-sided releasing paper, the problem by the above-mentioned releasing paper is not solved.

[0010] ** the above-mentioned ** — in the package structure of 1 and 2, a package bag is opened, and since it exfoliates so that the end of a package bag may be turned over, a napkin cannot be immediately picked out from a package bag. After pulling the releasing paper similarly exposed from open obturation of a package bag also in the package structure of above-mentioned **3 and opening, since a napkin and a releasing paper are exfoliated, a napkin cannot be taken out immediately. In the package structure of above-mentioned **4, a napkin cannot be immediately picked out from a package bag by pulling out from the front end or the back end of a napkin, folding up a napkin, since it became the developed form.

[0011] That is, the structure of the package object of the above-mentioned ** - ** has the problem that both tuck force over the detachability of the adhesive layer prepared in the sanitary napkin and the stratum disjunctum prepared in the package object and the shorts of this adhesive layer cannot be satisfied with sufficient practicality.

[0012] Moreover, with such package structure, although the package structure to which fixed some releasing papers to the internal surface of a package bag, and this fixed releasing paper and the adhesive layer of a sanitary napkin were made to adhere is also proposed, in case a package bag is opened and a sanitary napkin is taken out, the above-mentioned releasing paper is also held together and has the problem that ejection of a sanitary napkin cannot be performed smoothly.

[0013] Therefore, the purpose of this invention is to offer the package structure of a sanitary napkin where did not need to discard a releasing paper, and the sanitary napkin was equipped with the adhesive layer which has sufficient tuck force to shorts at the time of the use, excelled also in the detachability over the package bag of this adhesive layer, and it excelled in the ejection nature of a sanitary napkin further.

[0014]

[Means for Solving the Problem] this invention persons came to complete header this invention for the ability of the above-mentioned purpose to be attained by

preparing the specific opening section in a package bag which constitutes package structure, as a result of repeating research wholeheartedly that the above-mentioned problem should be solved.

[0015] Namely, an adhesive layer which this invention consisted of a package bag which carried out the unit protection of this to a sanitary napkin, and was prepared in a non-skin contact side of this sanitary napkin, In package structure of a sanitary napkin to which a releasing paper fixed to an internal surface of this package bag is made to come to adhere free [attachment and detachment] the above-mentioned sanitary napkin It is folded up by the longitudinal direction. The above-mentioned package bag It is made as [form / by having the opening section which consists of the one main opening section and the two subopening sections, and opening this opening section / output port of the above-mentioned sanitary napkin]. The above-mentioned main opening section Along with one side edge of the above-mentioned package bag, it is prepared in the shape of a straight line. Moreover, the length of this main opening section It is prepared so that it may become it is longer than the length of one side edge of the folded-up above-mentioned sanitary napkin, and shorter than the length of a up Norikazu side edge of the above-mentioned package bag. The above-mentioned subopening section From both ends of the above-mentioned main opening section, it is prepared in the direction which intersects perpendicularly with the above-mentioned main opening section in the shape of a straight line, and the above-mentioned opening section offers package structure (hereafter, in calling it "the 1st invention", it says this invention) of a sanitary napkin characterized by what is formed the shape of I character, and in the shape of [of KO] a character.

[0016] Moreover, an adhesive layer which this invention consisted of a package bag which carried out the unit protection of this to a sanitary napkin, and was prepared in a non-skin contact side of this sanitary napkin, In package structure of a sanitary napkin to which a releasing paper fixed to an internal surface of this package bag is made to come to adhere free [attachment and detachment] the above-mentioned sanitary napkin It is folded up by the longitudinal direction. The above-mentioned package bag It is made as [form / by having the opening section and opening this opening section / output port of the above-mentioned sanitary napkin]. The above-mentioned opening section Along with one side edge of the above-mentioned package bag, it is prepared in a curve configuration. Moreover, the length of the above-mentioned opening section It is made for a long time than the length of one side edge of the folded-up above-mentioned sanitary napkin. And package structure (hereafter, in calling it "the 2nd invention", it says this invention) of a sanitary napkin characterized by what that both ends or center is prepared for so that it may be located in a sanitary napkin side to one side edge of the above-mentioned sanitary napkin is offered.

[0017]

[Function] It comes to carry out the unit protection of the sanitary napkin with a

package bag, and, as for the package structure of this invention, it is sticking free [the releasing paper with which the adhesive layer of this sanitary napkin was fixed to this package bag, and attachment and detachment]. And as for the adhesive layer prepared in the sanitary napkin, the all are protected by the above-mentioned releasing paper before use of a sanitary napkin (at the time of conservation). Moreover, at the time of use of this sanitary napkin, a package bag is opened and a sanitary napkin is pulled out from the output port of the sanitary napkin formed by this. Under the present circumstances, since the above-mentioned output port side of a releasing paper is also turned over in opening and coincidence, in case a sanitary napkin is taken out, a releasing paper cannot be held and a sanitary napkin can be taken out smoothly, and it can stick on shorts etc., and use can be presented.

[0018]

[Example] Hereafter, although the example of this invention is explained to details with reference to an accompanying drawing, this invention is not limited to these.

[0019] The example of the 1st invention of this invention is explained with reference to drawing 1 - drawing 6 . Drawing 1 is the plan showing one example of the package structure of the sanitary napkin of the 1st invention, and drawing 2 is the I-I' cross section of the package structure shown in drawing 1 . Drawing 3 is the expansion perspective diagram of the sanitary napkin in drawing 1 , and drawing 4 is the perspective diagram showing the condition (sheet for a package) before carrying out the unit protection of the sanitary napkin of the package bag in drawing 1 . Moreover, it is the plan showing the mode which drawing 5 opened the package structure shown in drawing 1 , and formed the output port of a sanitary napkin, and drawing 6 is the cross-sectional view (the drawing 2 equivalent drawing) showing the mode which takes out a sanitary napkin from the package structure shown in drawing 1 .

[0020] The package structure 1 of the sanitary napkin of this example shown in drawing 1 and drawing 2 consists of a package bag 20 which carried out the unit protection of this to the sanitary napkin 10, and the adhesive layer 16 prepared in the non-skin contact side 12 of this sanitary napkin 10 and the releasing paper 21 fixed to the internal surface of this package bag 20 are made to come to adhere free [attachment and detachment]. The above-mentioned sanitary napkin 10 is folded up by the longitudinal direction. And the above-mentioned package bag 20 By having the opening section 30 which consists of the one main opening section 31 and the two subopening sections 32, and opening this opening section 30 It is made as [form / the output port 24 of the above-mentioned sanitary napkin 10]. The above-mentioned main opening section 31 Along with one side edge 22 of the above-mentioned package bag 20, it is prepared in the shape of a straight line. Moreover, the length of this main opening section 31 It is prepared so that it may become it is longer than the length of one side edge 18 of the folded-up above-mentioned sanitary napkin 10, and shorter than the length of the up Norikazu side edge 22 of the above-mentioned package bag 20. The above-mentioned subopening section 32 From the both ends of the above-mentioned main opening section 31, it is prepared

in the direction which intersects perpendicularly with the above-mentioned main opening section 31 in the shape of a straight line, and the above-mentioned opening section 30 is formed in the shape of I character.

[0021] Furthermore, in detail, as shown in the sanitary napkin 10 in the package structure 1 of the sanitary napkin of this example at drawing 3, the two bending sections 17 which divide the longitudinal direction equally abbreviation 3 in the front section 13, a center section 14, and the back section 15 are formed, and the rectangle-like adhesive layer 16 is formed in the non-skin contact side 12 side of the above-mentioned front section 13 and a center section 14. Moreover, the above-mentioned package bag 20 is formed of sheet 20' for a package shown in drawing 4, and the releasing paper 21 fixed through the fixed part 25 and the opening section 30 formed of the perforation are formed in this sheet 20 for package'. Moreover, the above-mentioned fixed part 25 is formed so that the edge of the releasing paper 21 by the side of the above-mentioned opening section 30 may be fixed.

[0022] And the above-mentioned package structure 1 is the sequence of this back section 15 and this front section 13 in the above-mentioned bending section 17 about the above-mentioned sanitary napkin 10. Turn on the skin contact side 11 side of this center section 14 at 3 chip boxes, pack by above-mentioned sheet 20' for a package so that the above-mentioned adhesive layer 16 may contact the internal surface of the above-mentioned releasing paper 21, and the edges on both sides 22 of this sheet 20' for a package, 22', and both the edges 23 are attached firmly. It is formed by carrying out the unit protection of the sanitary napkin 10 with the package bag 20.

[0023] Here, the above-mentioned front section 13 is a part located in a user's direction of a front face at the time of use of a sanitary napkin. Moreover, the edges on both sides 22 of the above-mentioned package bag 20, 22', and both the edges 23 are attached firmly with heat sealing.

[0024] In addition, the above-mentioned sanitary napkin 10 is the usual sanitary napkin to which the skin contact side 11 is formed by the web material of liquid impermeability [side / 12 / non-skin contact] of the web material of liquid permeability again, respectively, and has the absorber of liquid holdout further by it between the above-mentioned skin contact side 11 and the non-skin contact side 12.

[0025] After applying to the film which applied the binder on the above-mentioned non-skin contact side 12, or carried out exfoliation processing, the above-mentioned adhesive layer 16 carries out imprinting on the above-mentioned non-skin contact side 12 etc., and is formed. As a binder which forms the above-mentioned adhesion section, styrene system block polymer, a tackifier, and a softener are used as a principal component, and the thing holding 2 phase block structure of a styrene phase and a rubber phase etc. is used, for example.

[0026] As the above-mentioned styrene system block polymer, a styrene-ethylene-

butylene-styrene block copolymer (SEBS), a styrene-isoprene-styrene block copolymer (SIS), a styrene-butadiene-styrene block copolymer (SBS), a styrene-ethylene-propylene-styrene copolymer (SEPS), etc. are mentioned. The molecular weight of a styrene portion is desirable, the molecular weight of 7000-20000, and a rubber portion is desirable, and these styrene system BUROKKUPPORIMA is the block copolymers of 35000-70000.

[0027] Moreover, it is C5 whose softening temperature is 80 degrees C or more and whose molecular weight is 400-2000 as the above-mentioned tackifier. System petroleum resin and C9 System petroleum resin, and C5 / C9 The polyterpene resin which is the copolymer of system petroleum resin, an alpha pinene, beta pinene, or a dipentene, rosin system resin, or these hydrogenation objects are mentioned. As the above-mentioned softener, average molecular weight is mentioned [the process oil of 200-700, various plasticizers, polybutene, liquefied resin, etc.] for softening temperature below 10 degrees C.

[0028] Especially as the above-mentioned binder, the thing of the following presentation is desirable.

Styrene system block polymer The 100 weight sections, tackifier The 150 - 200 weight section, softener 30 - 100 weight section [0029] Moreover, as above-mentioned sheet 20 for package' which constitutes the above-mentioned package bag 20, a polyolefine film with a thickness of 5-20 micrometers is used preferably.

[0030] As the above-mentioned releasing paper 21, what applied the remover to the releasing paper base material is used preferably. As the above-mentioned releasing paper base material, a film or a nonwoven fabric, papers, and such composite material, such as polypropylene with a thickness of 5-50 micrometers, low density polyethylene, and polyvinyl alcohol, are mentioned preferably. As the above-mentioned remover, things, such as a silicone system, a fluorine system, and an isocyanate system, are desirable. It is desirable to apply and carry out stoving of the thing of a silicone resin system to the above-mentioned releasing paper base material especially as the above-mentioned remover, or to carry out to spray by the spray and to make a thin coat form etc., and to use.

[0031] Moreover, the above-mentioned fixed part 25 is formed of adhesives or a heat seal, and what uses styrene system block polymer as a principal component like the above-mentioned adhesive layer 16 as adhesives is used. Moreover, when based on a heat seal, as for a packing material and a releasing paper base material, it is desirable to use a polyolefine system film.

[0032] Moreover, as for the above-mentioned releasing paper 21 and the above-mentioned adhesive layer 16, it is desirable to choose both so that 180-degree Peel reinforcement by the following measuring method may be preferably set to 30-90g / 50mm. It becomes impossible to give the shear strength in that by which the usual releasing paper was completely fixed to the packing material to hundreds of g / 50mm - several kg / 50mm, and to make it exfoliate easily in the combination of the binder and releasing paper used as the above-mentioned 180-degree Peel

reinforcement. Moreover, if it enables it to remove easily as shear strength becomes low, the evil of this adhesive layer in which the adhesive layer and the releasing paper will not exfoliate easily at the time of conservation of package structure (before use of a sanitary napkin) adhering to portions other than a releasing paper will arise. Moreover, if the shear strength in the configuration which prepared the fixed part of a releasing paper in the packing-material inside by the side of opposite [of the up Norikazu side edge 22] (side edge 22') is farther [than 180 degree Peel reinforcement at the time of exfoliating] large and it is actually going to remove the releasing paper fixed through the fixed part of the side taken out like this example in the combination of the usual binder and a releasing paper, the evil in which a package bag will fracture will produce it.

[0033] 180-degree Peel binder <on the strength (bond strength)> was applied to the polyethylene terephthalate film by 50 micrometers in thickness, and it asked by measuring 180-degree Peel reinforcement when making 1 **** of 2kg platens a stainless plate (sus304), and sticking them to it by pressure.

[0034] About the feature portion in the package structure 1 of the sanitary napkin of this example, when it explains to details further, as it is shown in drawing 1, the above-mentioned package bag 20 is made as [form / the output port 24 of the above-mentioned sanitary napkin 10] by having the opening section 30 which consists of the one main opening section 31 and the two subopening sections 32, and opening this opening section 30. The above-mentioned main opening section 31 is formed so that it may become it is longer than the length of one side edge 18 of the longitudinal direction of the above-mentioned sanitary napkin 10 with which it was prepared in the shape of a straight line, and got down along with one side edge 22 of the above-mentioned package bag 20, and the length of this main opening section 31 was folded up, and shorter than the length of the up Norikazu side edge 22 of the above-mentioned package bag 20.

[0035] Moreover, the above-mentioned subopening section 32 is formed in the direction which intersects perpendicularly with the above-mentioned main opening section 31 in up Norikazu side edge 22 direction and its opposite direction in the shape of a straight line from the both ends of the above-mentioned main opening section 31, respectively, and the end by the side of the up Norikazu side edge 22 has reached even the up Norikazu side edge 22, respectively. And the above-mentioned opening section 30 formed of the above-mentioned main opening section 31 and the above-mentioned subopening section 32 is formed in the shape of I character as a whole.

[0036] And as first shown in drawing 5 at the time of use of the above-mentioned sanitary napkin 10, a sanitary napkin 10 can be taken out by opening the above-mentioned opening section 30, forming output port 24, and pulling out a sanitary napkin 10 in the direction of an arrow head, after turning up one side edge 22 of the package bag 20 so that it may be shown subsequently to drawing 6. Under the present circumstances, since the releasing paper 21 located in the center-section

14 side of the sanitary napkin 10 by turning up the above-mentioned package bag 20 exfoliates and it gets turned up, in case a sanitary napkin 10 is taken out, the releasing paper 21 located in a center-section 14 side cannot be held, and ejection actuation can be performed smoothly.

[0037] Moreover, since the above-mentioned releasing paper 21 is connected with the package bag 20 through the above-mentioned fixed part 25 in case a sanitary napkin 10 is taken out, sequential exfoliation is carried out from an output port 24 side. And when a sanitary napkin 10 is finally taken out, as for the above-mentioned releasing paper 21, the above-mentioned fixed part 25 and edge of the opposite side jump out of output port 24 outside (not shown).

[0038] Thus, since a releasing paper is connected with a package bag also after taking out a sanitary napkin, the package structure of this invention does not need to discard a releasing paper. Moreover, like ****, the package structure of this invention can be made as [pull / it / from the bending section], and it can also be taken out from the side edge of the longitudinal direction of a sanitary napkin, with a sanitary napkin folded up. Moreover, since the above-mentioned releasing paper carries out sequential exfoliation from the direction which takes out a sanitary napkin, in case the above-mentioned adhesive layer can be made to exfoliate smoothly and a sanitary napkin is taken out further, the evil of an adhesive layer adhering to parts other than a releasing paper, and adhesion declining does not arise.

[0039] The package structure 1 of the sanitary napkin of this example can be formed as follows, for example. In order to form the package structure 1 of the sanitary napkin of this example A sanitary napkin 10 is laid in sheet 20' for a package so that the above-mentioned adhesion section 16 may contact the releasing paper 22 of sheet 20' for a package shown in drawing 4 , respectively, after using as 3 chip boxes the sanitary napkin 10 shown in drawing 3 . First, subsequently Sheet 20' for a package can be inserted in so that both the edge 23 may lap mutually, and it can form by making it last to heat seal etc. and attaching firmly the edges on both sides 22 of the package bag 20, 22', and both the edges 23 to it.

[0040] Industrially, releasing paper fixed processing and a desiccation production process are continuously performed on the continuous sheet for a package, in order to create the opening section subsequently, the cutting production process which puts in a perforation by the rotary cutter is performed, and the continuation sheet with which the sheet for a package as shown at drawing 4 was connected continuously is created. The sanitary napkin independently used as 3 chip boxes continuously is laid on the releasing paper of the above-mentioned continuation sheet, after performing the cutting production process cut and separated and performing a unit protection and a winding-up production process according to an individual further, it can carry out carrying out continuously, respectively etc. and the firm attachment production process heat sealed at last can be performed.

[0041] Next, other examples of the 1st invention shown in drawing 7 are explained. In addition, especially about the point which is not explained in full detail, it is the

same as that of the example mentioned above. Drawing 7 is the perspective diagram showing other examples of the package structure of the sanitary napkin of the 1st invention.

[0042] package structure 1A of the sanitary napkin of other examples shown in drawing 7 — subopening section 32A — 1 side-edge from both ends of main opening section 31A 22A — receiving — an opposite direction — and it is prepared in the direction which intersects perpendicularly with the above-mentioned main opening section 31 in the shape of a straight line. And the above-mentioned opening section 30 is formed in the shape of [of KO] a character as a whole.

[0043] Next, the example of the 2nd invention of this invention is explained with reference to drawing 8. In addition, especially about the point of not explaining, it is the same as that of the example of the 1st invention mentioned above. Drawing 8 is the perspective diagram showing the example of the package structure of the sanitary napkin of the 2nd invention.

[0044] The package structure 101 of the sanitary napkin of the 2nd invention shown in drawing 8 consists of a package bag 120 which carried out the unit protection of this to the sanitary napkin 110, and the adhesive layer 116 prepared in the non-skin contact side 112 of this sanitary napkin 110 and the releasing paper 122 fixed to the internal surface of this package bag 120 are made to come to adhere free

[attachment and detachment]. The above-mentioned sanitary napkin 110 is folded up by the longitudinal direction. And the above-mentioned package bag 120 It is made as [form / by having the opening section 130 and opening this opening section 130 / the output port 124 of the above-mentioned sanitary napkin 110].

The above-mentioned opening section 130 Along with one side edge 122 of the above-mentioned package bag 120, it is prepared in the curve configuration.

Moreover, the length of the above-mentioned opening section 130 is made for a long time than the length of one side edge 118 of the folded-up above-mentioned sanitary napkin 110, and the both ends 133 are formed so that it may be located in a sanitary napkin 110 side to one side edge 118 of the above-mentioned sanitary napkin 110.

[0045] The above-mentioned opening section 130 is formed in details to the up Norikazu side edge 118 so that it may be located in a sanitary napkin 110 side, so that curve formation may be carried out at the shape of a circle and the both ends 133 may reach edge 123,123' of a package bag. Moreover, to the up Norikazu side edge 118, the center 134 of the above-mentioned opening section 130 is formed so that it may be located in the up Norikazu side edge 122 side. And like the 1st invention mentioned above, in case the above-mentioned package structure 101 is opened and a sanitary napkin 110 is taken out, after opening the opening section 130, the up Norikazu side edge 122 is turned up and taken out. Thereby, since the output port side in the releasing paper 121 (not shown) by the side of the center section of the sanitary napkin 110 gets turned up, there is nothing and it can take out smoothly holding a releasing paper together with a sanitary napkin.

[0046] Other examples of the 2nd invention are explained with reference to drawing 9 and drawing 10 . Drawing 9 is the plan showing other examples of the 2nd invention here, and drawing 10 is the plan showing the example of further others of the 2nd invention. In addition, especially about the point of not explaining, it is the same as that of the example of the 1st invention mentioned above.

[0047] As for package structure 101A of the sanitary napkin of other examples of the 2nd invention shown in drawing 9 , curve formation of the above-mentioned opening section 130A is carried out at the shape of a circle, and to 1 side-edge 118of above-mentioned sanitary napkin 110A A, the central 134A is prepared so that it may be located in the sanitary napkin 110A side. Moreover, the both-ends 133A is prepared in the 1 side-edge 122A side of the above-mentioned package bag 120A to 1 side-edge 118of above-mentioned sanitary napkin 110A A so that edge 123A of a package bag and 123A' may be reached.

[0048] As for package structure 101B of the sanitary napkin of the example of further others of the 2nd invention shown in drawing 10 , curve formation of the above-mentioned opening section 130B is carried out at the trapezoid configuration, and the both-ends 133B is prepared in the business which reaches edge 123of package bag 120B B, and 123B'. Moreover, the both-ends 133B is prepared so that it may be located in the sanitary napkin 110B side to 1 side-edge 118of above-mentioned sanitary napkin 110B B, and the central 134B is prepared so that it may be located in the 1 side-edge 122B side of package bag 120B to 1 side-edge 118of above-mentioned sanitary napkin 110B B. Thus, not only the configuration formed of a curve but the configuration formed of a straight line as shown in drawing 10 is included in the above "a curve configuration" in the 2nd invention.

[0049] In addition, the package structure of the sanitary napkin of this invention is not limited to the example mentioned above, can arrange two or more things of configurations, such as the shape of a line, the shape of a spiral, and a dot, in not the thing of the shape of a rectangle which mentioned the above-mentioned adhesive layer above but the above-mentioned output port, and parallel, and can also form them in them, and can also make the above-mentioned fixed part the shape of a dot etc. Moreover, in the package structure of the sanitary napkin of this invention, even if it prepares the above-mentioned opening section so that the above-mentioned output port may be formed along with the bending section which folded up the above-mentioned sanitary napkin, it can do. Moreover, the number of the above-mentioned releasing papers can also be set to one or three or more, without being limited to an above-mentioned example.

[0050]

[Effect of the Invention] It is not necessary to discard a releasing paper, and a sanitary napkin is equipped with the adhesive layer which has sufficient tuck force to shorts at the time of the use, and the package structure of the sanitary napkin of this invention is excellent also in the detachability over the package bag of this adhesive layer, further, it is excellent in the ejection nature of a sanitary napkin, and,

specifically, does effects, such as following ****, so.

[0051] ** A package bag is extended or does not split.

** The sound made in case a bag is removed is small.

** A package bag does not contract with heat.

** It is easy to remove a package bag from an adhesive layer.

** Much adhesion sections can be prepared.

** The time and effort which removes the releasing paper at the time of use of a sanitary napkin can be saved. It is not necessary to discard releasing papers, such as a flap portion especially used in the usual napkin with a wing, and it does not block [this releasing paper discards and] a toilet bowl.

** The adhesive layer of a sanitary napkin can be made into the size of a degree which has sufficient fixed force to shorts again.

** By it being compact, and not turning over a firm attachment bag (package bag), not removing [being unable to make magnitude of package structure small,] from a napkin, and merely sampling a napkin from a firm attachment bag, in case a napkin can be removed from a releasing paper by one-touch and a sanitary napkin is taken out further, don't hold a releasing paper together with a sanitary napkin.

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] Drawing 1 is the plan showing one example of the package structure of the sanitary napkin of the 1st invention.

[Drawing 2] Drawing 2 is the I-I' cross section of the package structure shown in drawing 1 .

[Drawing 3] Drawing 3 is the perspective diagram of the sanitary napkin shown in drawing 1 .

[Drawing 4] Drawing 4 is the perspective diagram of the condition (sheet for a package) before packing the sanitary napkin of the package bag shown in drawing 1 .

[Drawing 5] Drawing 5 is the plan showing the mode which opened the package structure shown in drawing 1 , and formed the output port of a sanitary napkin.

[Drawing 6] Drawing 6 is the cross-sectional view (the drawing 2 equivalent drawing) showing the mode which takes out a sanitary napkin from the package structure shown in drawing 1 .

[Drawing 7] Drawing 7 is the plan showing other examples of the package structure of the sanitary napkin of the 1st invention.

[Drawing 8] Drawing 8 is the plan showing one example of the package structure of the sanitary napkin of the 2nd invention.

[Drawing 9] Drawing 9 is the plan showing other examples of the package structure of the sanitary napkin of the 2nd invention.

[Drawing 10] Drawing 10 is the plan showing the example of further others of the package structure of the sanitary napkin of the 2nd invention.

[Description of Notations]

1 Package Structure of Sanitary Napkin

10 Sanitary Napkin

11 Skin Contact Side

12 Non-Skin Contact Side

13 Front Section

14 Center Section

15 Back Section

16 Adhesive Layer

17 Bending Section

18 One Side Edge

20 Package Bag

The sheet for 20' package

21 Releasing Paper

22 One Side Edge

23 Edge

24 Output Port

25 Fixed Part

30 Opening Section

31 The Main Opening Section

32 SubOpening Section

[Translation done.]

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

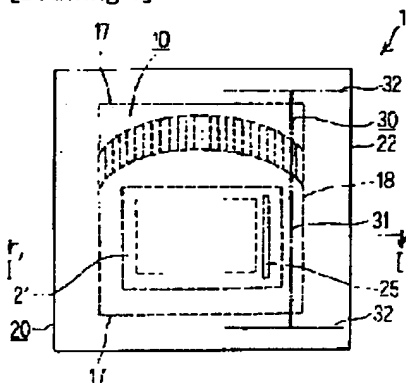
1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.*** shows the word which can not be translated.

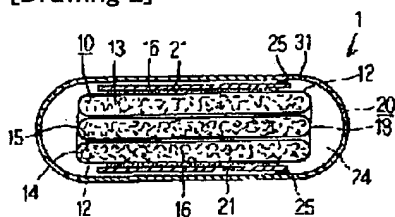
3.In the drawings, any words are not translated.

DRAWINGS

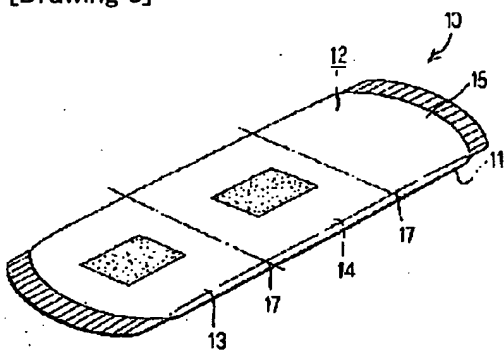
[Drawing 1]



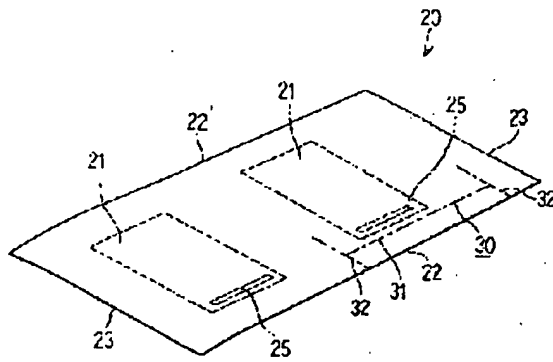
[Drawing 2]



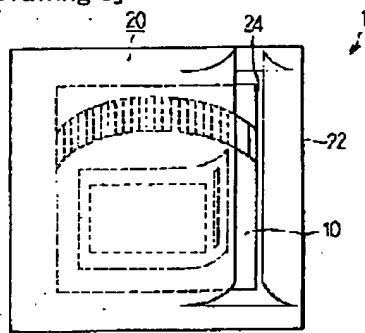
[Drawing 3]



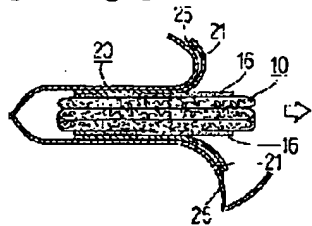
[Drawing 4]



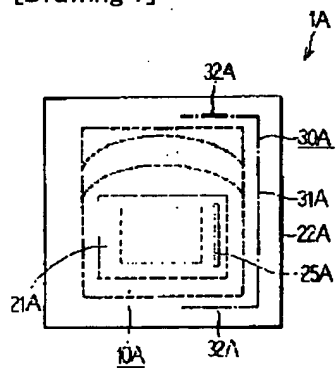
[Drawing 5]



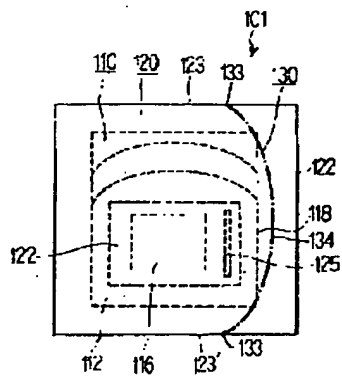
[Drawing 6]



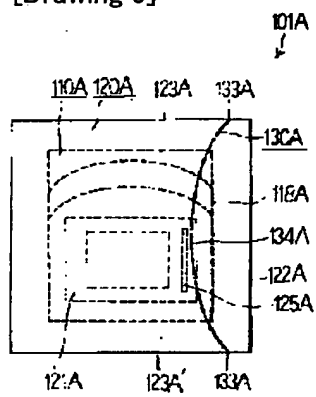
[Drawing 7]



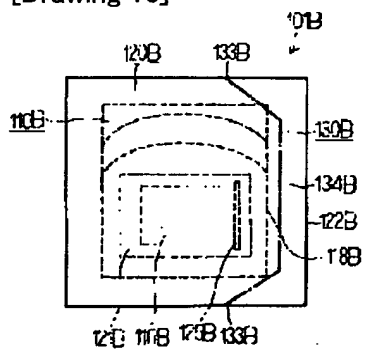
[Drawing 8]



[Drawing 9]



[Drawing 10]



[Translation done.]